Composting is nature's recycling system

A guide to simple backyard composting techniques

Nature's recycling system

Nature's recycling system is simple and efficient. Leaves and branches that fall to the forest floor form a rich, moist layer of *mulch* that protects the roots of plants and provides a home for nature's recyclers: bacteria, worms and insects. These natural recyclers feed on the organic litter, turning it into compost. As the mulch decomposes, nutrients essential to plant growth are released into the soil and absorbed through the roots. The new leaves and branches that grow eventually die and fall to the ground as mulch, and the cycle continues.

Nature's recyclers are hard at work in our yards and gardens too. They can be found in the soil as well as on the surfaces of twigs, leaves and grass clippings. If we place our yard wastes in a suitable spot, nature will turn them into compost, just as it does in a forest.

Mulching

We can easily put nature's recycling system to work in our gardens by spreading yard waste ground trees, shrubs and other plants. This is called *mulching.* Mulching keeps soil loose and Moist, smothers weeds, prevents soil erosion and releases nutrients as the material decomposes. Common mulching materials and uses include:

Waste Material	**Recommended Use As Mulch**
• Grass clippings • Green leaves	Place a half-inch layer around vegetables flowers, trees and shrubs,
• Brown Leaves • Pine needles • Sawdust	Spread a 3-4 inch layer around trees and shrubs out to the drip line. Use it to cover garden beds through the winter.
• Wood chips	Surround trees and shrubs with a 3-inch layer. Chips also can be used to soften garden paths.

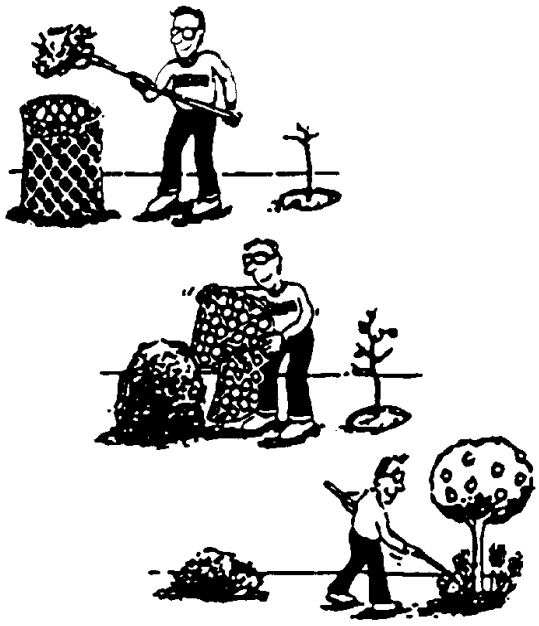
Note: Sawdust and wood chips should only be used as a surface mulch on trees and shrubs. Do not use woody wastes on annual planting areas where they can be mixed into the soil, and never mulch with diseased or insect-infested plant waste.

Compost piles, bins

For easy and efficient composting, yard wastes simply can be stacked into piles. Leaves, grass clippings, twigs and weeds - - except ones that have gone to seed or spread by runners, such as Morning Glory or Buttercup - easily can be added to a pile as they are collected from the yard. It is not necessary to add soil, fertilizer or compost starter to a pile because all the ingredients needed for composting am already in yard waste.

A tidier composting method makes use of *holding* bins, simple structures that surround and confine compost piles. Bins can be made with wire mesh shaped into a ring or from wooden pallets fastened together to form a square.

Harvesting the finished compost from a pile or holding bin is easy. After waiting six months to a year for the yard waste to fully decompose, remove the bin -- if used - and set it up again nearby. Starting at, the top of the pile, remove any recently added waste and either place it into the relocated bin or use it to begin a new pile. When you reach materiel that resembles rich soil, remove it for use in your garden. Large branches and other under-composted waste should be pulled out and shredded for further composting.



Food wastes

Food scraps should not be placed in simple yard waste compost pile or bin because they may attract pests. The easiest way to compost food waste is by burying it under at least 8 inches of soil. Using a shovel or post -hole digger, dig holes in your garden or around the drip line of trees and shrubs. Mix the food waste into the soil at the bottom of the holes and cover with soil. Fruit and vegetable scraps, coffee grounds & tea bags, grains and eggshells safely can be composted this way. Meat, fish or dairy products should not be buried at home because they tend to attract pests.

Compost farming

Just as a farmer can increase crop yields by creating ideal growing conditions through cultivating, fertilizing and watering, at home we can speed up the compost process by creating ideal conditions, too. Some pointers for compost farming include:

Adequate Watering Lack of water is the mast common problem for home composting. Composted materials should be moist, but not dripping wet. Cover piles with dark plastic or tarp to prevent them from drying out.

Balanced Nutrients Compost organisms thrive on a balanced diet of carbon and nitrogen. For rapid decomposition, mix equal parts of nitrogen-rich green wastes, such as grass clippings, with carbon-rich brown wastes, such as dead leaves or corn stalks.

Aeration A steady supply of air is required for efficient composting. Turning or mixing a compost pile will help air to reach the center. A wide variety of multiple-bin composting systems and rotating-drum composters are available to simplify turning the compost.

Surface Area. The more surface area bacteria have to work on, the faster they will decompose waste. To speed up the composting, you can chop up yard waste with a shovel or machete, run over them with a lawnmower or put them through a shredder.

Uses for compost

Compost contains nutrients, but it is not a substitute for fertilizers. Compost holds nutrients in the soil until plants can use them, serves to loosen and aerate clay soils and helps retain water in poor, sandy soils.

As a soil amendment - Mix 2-5 inches of compost into vegetable and flower gardens each year before planting. For new tree and shrub plantings, mix several inches of compost into the backfill and surrounding soil.

As a potting mixture - Use sifted compost to make a rich, light potting soil for house plan and seedlings. To enrich purchased potting soils, add one pan of compost to two parts soil, or make your own mixture by using equal parts of compost and sand.

As mulch - Spreading compost around annuals, trees and shrubs helps to keep roots moist, smother weeds and prevent soil compacting. Start a few inches away from the plant stem and continue to a point beyond its outermost leaves and branches. Spread 1-2 inches of compost around annual flowers and vegetables and up to 6 inches around trees and shrubs.

Why you should compost

There are several good reasons for composting your yard and food waste, including:

- Composting can save you money, not only on garbage collection and dump fees, but you won't need to buy leaf bags or as many trash bags.
- Composting turns yard waste into resources. Good compost is expensive to buy, but free for the making. Money does grow on trees with home composting.
- Composting is convenient. It’s easier to compost yard waste than to bag and drag it to the trash can, curb or landfill.
- Composting benefits soil and plants. Using compost helps your plants grow healthier and faster by keeping the soil loose and well drained.
- Composting saves landfill space, Home composters are helping to solve our garbage disposal problem by reducing the volume of solid waste needing to be landfilled or incinerated.

For more information about composting techniques, contact the:
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Phone (3171 232-8172, or through the toll-free Environmental Helpline, 1-800-988-7901.
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